

To the Editor,

Please consider our enclosed paper "*The Stepwise Reduction of Multiyear Sea Ice Area in the Arctic Ocean Since 1980?*" for publication within JGR-Oceans. Within this paper we use a combination of remotely sensed ice age, drift and concentration fields to examine the loss of multiyear sea ice from the Arctic Ocean as the net balance of Export, Melt and Replenishment. This is a novel analysis that provides new insight into what has driven the transition from an old thick multiyear ice cover of the 1980s to the younger thinner seasonal ice cover that currently covers the Arctic Ocean. This work builds off of our previous paper on multiyear sea ice loss in the Beaufort Sea that was published in GRL last year (doi: <https://doi.org/10.1029/2021GL097595>) and builds off several papers previously published in JGR and JGR-Oceans over the years, including a long list of papers by Dr. Ron Kwok. We think that this is a unique and exciting paper that really advances our collective understanding of the dramatic reduction in Arctic sea ice. We are confident that this work would fit well within JGR-Oceans and make a significant contribution to the sea ice community.

We don't have any conflicts of interest with the editors at JGR. We have suggested five reviewers who are experts in this field and would be the top candidates to review this manuscript; in particular Dr. Ron Kwok who has worked on this topic for decades and although he is retired from NASA may still be willing to review this manuscript through his adjunct appointment at University of Washington. We have no reviewers to exclude.

Lastly, all data used in this analysis is freely available online with active links provided in the Data Availability Section at the end of the manuscript.

Thank you for consideration,

- Dave Babb

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